

ABSTRACT OF THE DISCLOSURE

This invention makes public a kind of DNA chip for diagnosing the mutation of
5 the hereditary anemia related genes with the character of fixed specific NA
probes for testing the mutation of hereditary anemia related gent on the glass
slide, silica plate, membrane and macromolecular materials. In comparison with
current techniques, in this invention a 70×4 DNA probe is fixed on the surface
of a carrier the size of a microscope slide, and this probe can detect hereditary
10 anemia such as α-, or β-thalassemia, and hemoglobin abnormality caused by
related gent mutation. The invention has the statistic characteristics of parallel
analysis and multiple analysis. Under the specific elution conditions, the
completely matched and single-base-non-matched hybridization can be
distinguished. Consequently, this DNA chip is appropriate for early diagnosis
15 and prenatal screening of hereditary anemia.

20

25